

**Credit Opinion: Landsvirkjun**

Global Credit Research - 15 Feb 2013

Reykjavik, Iceland

**Ratings**

Category	Moody's Rating
Outlook	Stable
Bkd Senior Unsecured	Baa3
Bkd Other Short Term	(P)P-3

**Contacts**

Analyst	Phone
Joanna Fic/London	44.20.7772.5454
Niel Bisset/London	
Andrew Blease/London	

**Key Indicators**

Landsvirkjun	Dec-11	Dec-10	Dec-09	Dec-08
FFO Interest Coverage	2.7x	3.2x	2.8x	1.4x
CFO / Net Debt	9.5%	8.0%	6.4%	4.5%
FFO / Net Debt	8.2%	7.1%	5.9%	2.6%
RCF / Net Debt	8.2%	7.1%	5.9%	2.3%
RCF / (Capex + Acquisitions - Divestitures)	293.2%	622.1%	256.8%	30.4%

Note: For definitions of Moody's most common ratio terms please see the accompanying [User's Guide](#).

**Opinion**

**Corporate Profile**

Landsvirkjun is Iceland's largest electric utility, owning the majority of the transmission grid and responsible for around 75% of Iceland's total electricity production of 17 TWh. It provides energy for domestic users via electricity sales to public utilities, although the bulk of sales are to power intensive industries (PII), mostly for aluminium smelting, an important source of Iceland's foreign currency earnings.

Landsvirkjun was established on 1 July 1965, as a jointly owned enterprise by its shareholders the Republic of Iceland (50%), the City of Reykjavik (45%) and the Township of Akureyri (5%). Following a period of negotiation, the Republic of Iceland agreed to buy the shares of both the City of Reykjavik and the Township of Akureyri and therefore assumed full ownership of Landsvirkjun as of 1 January 2007. Landsvirkjun remains a partnership and in order to meet the requirements of the partnership agreement, 99.9% of the company is owned by the Republic of Iceland and 0.1% by Eignarhlutir hf, a special purpose vehicle owned by the Republic of Iceland. The ownership changes and the amended law on Landsvirkjun Nr 42/1983 came into effect on 1 January 2007. This act was further amended in 2011.

**Recent Developments**

On 15 February 2013, we changed the outlook to stable from negative on the (P)Baa3/ P-3 ratings of Landsvirkjun. This followed a change in outlook on the Baa3 rating of the Government of Iceland to stable from negative on 7

February 2013. Moody's decision to revise the outlook on the Government of Iceland's rating was based on the reduced event risk following the European Free Trade Association's (EFTA) Court decision in January, which added to a series of positive developments in Iceland over the past 12 months.

### **Rating Rationale**

Landsvirkjun's Baa3 rating attributes very high support to the company from the Icelandic government, given the government's provision of a guarantee of collection to cover the utility's debts. Whilst the guarantees of collection are not a timely payment guarantee and therefore do not offer bondholders the same degree of protection as a direct payment guarantee, Moody's expects that the state would intervene in a timely fashion and provide financial or other assistance, in case it is needed. This view is based on the track record of the government in providing support to Landsvirkjun in 2009. Furthermore, in Moody's view, the government would have the capacity and ability to provide any necessary support on a timely basis, particularly given the visibility that Landsvirkjun has with regard to its debt commitments and its alternate liquidity profile. Moody's assessment of very high support is further reinforced by the strategic importance of Landsvirkjun to Iceland, given the company's position as the country's dominant electric utility. This assessment also reflects the significant role played in the economy by the aluminium smelting industry in Iceland, which relies in large part on the electricity provided by Landsvirkjun.

Landsvirkjun's standalone assessment, expressed as a baseline credit assessment (BCA) of b1 reflects (1) Landsvirkjun's high financial leverage; (2) exposure to aluminium prices in a weak commodity market; (3) concentrated exposure to a comparatively small number of counterparties in the aluminium industry; (4) currency risk; and (5) vulnerability to increases in funding costs in the event of higher interest rates. However, these negatives are partially offset by its dominant position in the Icelandic energy market, supported by the company's low-cost renewable generation asset base, albeit in a small and isolated market.

### **DETAILED RATING CONSIDERATIONS**

In our assessment of Landsvirkjun's credit profile, we apply our global Rating Methodology for Unregulated Utilities and Power Companies, published in August 2009. Under this methodology, Landsvirkjun is considered an Unregulated Power Company and the grid output maps to ba2. In assigning the BCA of b1, we give additional weight to the company's exposure to aluminium prices in a weak commodity market, a degree of currency mismatch between revenues and debt service costs, as well as vulnerability to increased funding costs in the event of higher interest rates.

The following factors influence Landsvirkjun's rating under the Unregulated Utilities and Power Companies methodology:

#### **FACTOR 1: MARKET ASSESSMENT, SCALE AND COMPETITIVE POSITION**

##### **(a) Market and Competitive Position**

Landsvirkjun is Iceland's largest electric utility, owning 65% of Landsnet, the national transmission grid and generating around 75% of the country's electricity production. The company's installed capacity, totalling 1,860 MW, is mainly based on hydro sources, which account for approximately 96% of the total owned capacity, with geothermal plants accounting for the remainder. Given the very low marginal costs of production associated with its hydro sources, Landsvirkjun has a very attractive generation portfolio, albeit in a small and isolated market, where there is only some competition from regional companies, primarily Reykjavik Energy and Hitaveita Sudurnesja.

In scoring the company A on this factor, we recognise Landsvirkjun's significant market position in Iceland, but also consider the relatively small size of the overall market, its relative illiquidity and its concentration exposure to a comparatively small number of counterparties in the aluminium industry.

##### **(b) Geographic Diversity**

Landsvirkjun scores Ba on this factor as it operates within a single economic area with low demand volatility as much of its power is sold under long-term contracts.

#### **FACTOR 2: CASH FLOW PREDICTABILITY OF BUSINESS MODEL**

##### **(a) Effectiveness of Hedging Strategy**

Landsvirkjun is predominantly a wholesale producer, with over 85% of revenues coming from power sales. The

balance is from transmission activities, spread between local utilities and PIs. Whilst recognising the attractiveness of the cost structure associated with Landsvirkjun's hydro base, we note that the power price can be very volatile given its linkage to, inter alia, the price of aluminium, when the costs associated with this generation source are largely fixed, thus affecting cash flow predictability.

Transmission revenues account for about 10% of Landsvirkjun's revenues. In addition, around 15% of revenues are derived from sales to local utilities, which are considered relatively low risk given the number of short and medium-term sales contracts. They are denominated in ISK and linked to the Icelandic consumer price index (CPI). This customer base comprises public utilities, including Reykjavik Energy, and other municipal distribution companies for contracts amounting to 1,850 GWh per annum.

The bulk of sales (about 75% of total revenues) are to PIs. About half of PI sales are through contracts directly linked to aluminium prices and based in US dollars. In 2012, PI customers accounted for an estimated 11,000 GWh of Landsvirkjun's sales under the following contracts: Alcoa Fjarðaál, Alcan Iceland, Nordural, Icelandic Alloys and Becromal. These contracts have long term maturities, all of which are "take or pay", where the customers have to pay, whether or not they use the electricity. After an amendment to one of the power contracts in October 2010, as the first step in Landsvirkjun's new strategy for pricing energy in Iceland, the company's exposure to aluminium price volatility was reduced, although 49% of PI sales remain linked to aluminium prices.

Despite the long-term nature of the contracts with the aluminium smelters, Landsvirkjun's cash flows are exposed to a high level of volatility, primarily as a result of the link between the power sale price and the aluminium price. The aluminium price tends to be very volatile. For example, the aluminium price underwent a major correction, when it dropped from over \$3,000 per tonne in July 2008 to around \$1,300 per tonne in February 2009. As of beginning of February 2013, spot aluminium was around \$2,000. We note that in order to reduce cash flow volatility, the company has adopted a hedging strategy, wherein they hedge a certain percentage of their future energy sales. The actual amount hedged is dependent on market conditions and aluminium price forecasts.

We assign Landsvirkjun a score of B for the Effectiveness of Hedging Strategy sub-factor, reflecting the inherent volatility in much of the cash flows given their link to the aluminium price, as well as the concentration of contracts with a small number of companies.

#### (b) Fuel Strategy and Mix

Landsvirkjun currently operates 11 hydropower plants and two geothermal plants. Landsvirkjun's electricity production in 2012 is estimated to have been 12,500 GWh, of which 96% from hydrological resources and 4% from geothermal resources. Overall, Iceland's fuel mix is based on 73% hydro and 27% geothermal sources. The company bought approximately 400 GWh for resale to PIs.

A score of single-B is assigned for Fuel Strategy and Mix, reflecting the limited diversification of fuel source, partially offset by the value of the renewable nature of its fuel mix.

#### (c) Capital Requirements and Operating Performance

Following a period of significant expansion of the production plants, current investments are relatively modest. The biggest project is the Budarhals hydro power project for 95 MW of capacity (to produce 585 GWh). The plant is scheduled to be fully operational by year-end 2013. Other investments are mainly related to maintenance, with some investment in developing the transmission grid. Possible further projects include a number of new power projects in Southern Iceland. Geothermal power plants in the North-East of Iceland are also possibilities. Landsvirkjun has however, not undertaken any obligations regarding new projects.

Landsvirkjun has also engaged in a feasibility study on a sub-marine cable between Iceland and Europe. This would be a very significant and strategic project for Iceland. However, no decisions have been made with regard to its construction and Landsvirkjun's possible involvement.

The Capital Requirements and Operating Performance sub-factor is scored A. Operating performance has been solid and future output is considered to be relatively predictable. Overall, moderate levels of capex are required for maintenance and for environment-related expenditure, and availability at Landsvirkjun's plants is generally high (according to historical average the units are available for generation 96% of the time).

### FACTOR 3: FINANCIAL POLICY

Landsvirkjun scores B on this factor, given the company's historical reliance on debt funding to finance a large

investment programme, albeit under the guarantee of collection of its owners, without any equity support. The past financial policies have resulted in the company's leveraged financial profile and consequent refinancing risk.

However, we note that Landsvirkjun has strengthened its liquidity position since the start of the financial crisis and we expect that the company will continue following its prudent financial policies in terms of maintaining adequate amounts of committed facilities to manage refinancing risk in the volatile financial markets.

#### FACTOR 4: FINANCIAL STRENGTH METRICS

Landsvirkjun scores weakly on financial metrics. The company's financial profile remains highly leveraged, although we note an improvement in 2009-11, following completion of a very sizeable capital investment programme. The company's financial flexibility remains, however, constrained by significant exposure to movement in aluminium prices and interest rates, as well as more limited exposure to currency risk, although Landsvirkjun does enter into hedging contracts to mitigate these risks.

Spot aluminium prices are currently around \$2,000 per tonne, down from the peaks of early 2008, but nonetheless, an improvement on the lows seen in late 2008 and 2009. We believe aluminium prices could remain under pressure for some time, given the weak end-market environment (excluding China), the high inventory position on the London Metal Exchange, potential stockpile sales by China's State Reserve Bureau and the level of aluminium tied up in financing transactions.

Given lower aluminium prices in 2012, financial metrics will weaken compared with their strong 2011 levels, although free cash flow generation will be positive allowing for further deleveraging of the company.

A large portion of Landsvirkjun's debt is subject to variable rates, and hence although the company has benefited from the recent drop in market interest rates, it is also vulnerable to a rise in its total cost of debt as a result of higher credit spreads.

Landsvirkjun's reporting currency is US dollar, the currency in which most of its revenues are derived (68% US dollars, 25% Icelandic krona, 7% Norwegian krona). As a substantial proportion of its debt is US dollar denominated, the company has limited exposure to the weak Icelandic krona. It has, however, some sensitivity to adverse movements in the US dollar against the euro given the weighting towards the latter currency in its funding base (around 33% of debt as of end-2012 was euro denominated).

With the completion of major investment projects, we expect that the company's debt coverage metrics such as funds from operations (FFO)/ net debt and retained cash flow (RCF)/ net debt will improve gradually and over time, although will likely remain in the mid- to high-single digits into the medium term. The pace of improvement in Landsvirkjun's credit metrics will be primarily dependent on the level of aluminium prices and funding costs, but also whether the company undertakes any further investment projects or pays dividends.

#### OTHER CONSIDERATIONS

Landsvirkjun's rating assessment reflects the application of our Rating Methodology for Government-Related Issuers (GRIs). Landsvirkjun's Baa3 rating incorporates an uplift for potential government support to its standalone credit quality. The uplift to the BCA is a result of the Government of Iceland's credit quality, which owns Landsvirkjun, coupled with our assessment of a very high probability of government support in the event of financial distress, as well as high default dependence (i.e., degree of exposure to common drivers of credit quality).

Our assumption of a very high support reflects the explicit support for Landsvirkjun from its shareholder - the Icelandic state - through the guarantee of collection. Under Landsvirkjun's original Act of 1983 (as subsequently amended in 2007), and the partnership agreement, the shareholders were liable for the obligations of Landsvirkjun at the time they were incurred in proportion to their shareholding. Nonetheless, ultimately there was a joint and several liability of all shareholders for the obligations.

The Act on Landsvirkjun was further amended in 2011. The revised law states that Landsvirkjun must now apply for a guarantee from its owners on a case by case basis and that only financial obligations can benefit from such guarantees. Previously the guarantee of collection benefitted all creditors and no specific approvals were required. In this regard, we note that the state's guarantees of the company's financial liabilities and long-term power contracts entered into before the amendment are unaffected.

The terms of the \$2.5 billion EMTN programme allow for issuance of notes only with the benefit of a guarantee of collection provided by the Republic of Iceland and Eignarhlutir ehf. Despite the fact that a guarantee of collection is

not a timely payment guarantee, we believe that there are strong incentives for the owners to provide timely support to Landsvirkjun. However, if the terms of the programme were to be changed such that the company were able to issue notes also without such guarantees, such notes may not benefit from the same rating.

Guarantees of collection, which are common in the Nordic region, do not offer bondholders the same degree of protection as a timely payment guarantee. There is a potential risk of non-timely repayment should the company fail to meet its obligations, as exhaustive administrative and legal procedures must be followed before the shareholders are obliged to pay. However, given Landsvirkjun's vital strategic importance to Iceland and other incentives for the shareholders (such as its liability for penalty interest), we expect that the state would intervene in a timely fashion and provide financial or other assistance.

Our assessment of high default dependence balances Landsvirkjun's position as the country's dominant electric utility with the company's high level of US dollar-denominated revenues from contracts with exporting aluminium smelters with international parent companies.

## **Liquidity**

As of 30 June 2012, Landsvirkjun had \$245 million of cash and cash equivalents, as well as access to \$284 million under committed long-term revolving credit facilities (RCFs). Of this amount, \$200 million relates to a committed revolving facility with international commercial banks, maturing in December 2015 and the remaining \$84 million (ISK10.5 billion equivalent) relates to an RCF facility with Icelandic banks, also maturing in December 2015.

Landsvirkjun has a relatively well-spread maturity profile, which mitigates refinancing risk. However, cash flow could be challenged by low aluminium prices and increasing interest rates, which could negatively impact these assumptions.

We understand that some of the bank facilities (fully undrawn) contain financial covenants but Landsvirkjun shows an adequate headroom towards the default levels.

## **Other Considerations**

### **MARKET STRUCTURE**

In response to the EU directive on separation of transmission, generation, distribution and sales of electricity, the Icelandic Parliament ratified The Electricity Act, a law that was enforced on 1 July 2003. The market has been progressively liberalised, and there has been some pressure on domestic electricity prices. However, the market is rather small and too isolated for meaningful competition. Landsvirkjun has entered into long-term contracts with local supply companies to protect against this risk, as described under the Hedging Strategy section.

In 2005, as a result of the Electricity Act, transmission activities were spun off into a separate subsidiary, Landsnet. Landsvirkjun still maintains a majority 65% share, but no longer operates the transmission grid.

### **OWNERSHIP**

Incorporation, which would permit a privatisation of Landsvirkjun, has been periodically raised as a topic in Iceland. However, the current partnership structure suggests that no such change is likely in the medium term.

## **Rating Outlook**

The stable outlook on the ratings of Landsvirkjun reflects the stable outlook on the Icelandic government's ratings.

### **What Could Change the Rating - Up**

An improvement in the sovereign rating would be required before Moody's would consider an upgrade of Landsvirkjun's ratings under an assumption of a continued very high support from the government.

### **What Could Change the Rating - Down**

Moody's would expect to downgrade the rating (1) following any downgrade of the sovereign rating; or (2) if it were to perceive that there were a reduced likelihood of the government providing timely support to Landsvirkjun. In addition, a significant deterioration in the standalone credit quality of Landsvirkjun could exert a downward rating pressure.

## Rating Factors

### Landsvirkjun

Unregulated Utilities and Power Companies	Aaa	Aa	A	Baa	Ba	B	Caa
<b>Factor 1: MARKET ASSESSMENT, SCALE AND COMPETITIVE POSITION (20%)</b>							
a) Market and Competitive Position			X				
b) Geographic Diversification					X		
<b>Factor 2: CASH FLOW PREDICTABILITY OF BUSINESS MODEL (20%)</b>							
a) Hedging Strategy						X	
b) Fuel Strategy and Mix						X	
c) Capital Requirements and Operating Performance			X				
<b>Factor 3: FINANCIAL POLICY (10%)</b>						X	
<b>Factor 4: FINANCIAL STRENGTH METRICS (50%)</b>							
a) FFO + Interest / Interest					X		
b) FFO/Net Debt						X	
c) RCF/Net Debt						X	
d) FCF/Net Debt					X		
<b>Rating:</b>							
a) Indicated Rating from Grid					ba2		
b) Actual BCAAssigned						b1	

Government Related Issuer	Factor					
a) Baseline Credit Assessment	b1					
b) Government Local Currency Rating	Baa3					
c) Default Dependence	High					
d) Support	Very High					



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